

**Commonwealth of Massachusetts**  
Executive Office of Health and Human Services

***EOHHS  
Technology &  
Architecture***



Integration of Legacy Systems  
with an Enterprise Service Bus

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# *Subject*

## What is an Enterprise Service Bus (ESB)?



The ESB is business integration software infrastructure designed to:

- Provide mediation and connection to applications and channels
- Consume, publish and route messages
- Transform, map and normalize message content
- Monitor and administrate transactions
- Provide service registration and discovery
- Provide metadata and schema management

Legacy Integration using an ESB is accomplished by:

- Using 'Wrappers' to
  - Expose internal legacy processing capabilities through web services
  - Expose internal legacy data through web services, queues, and file transfers

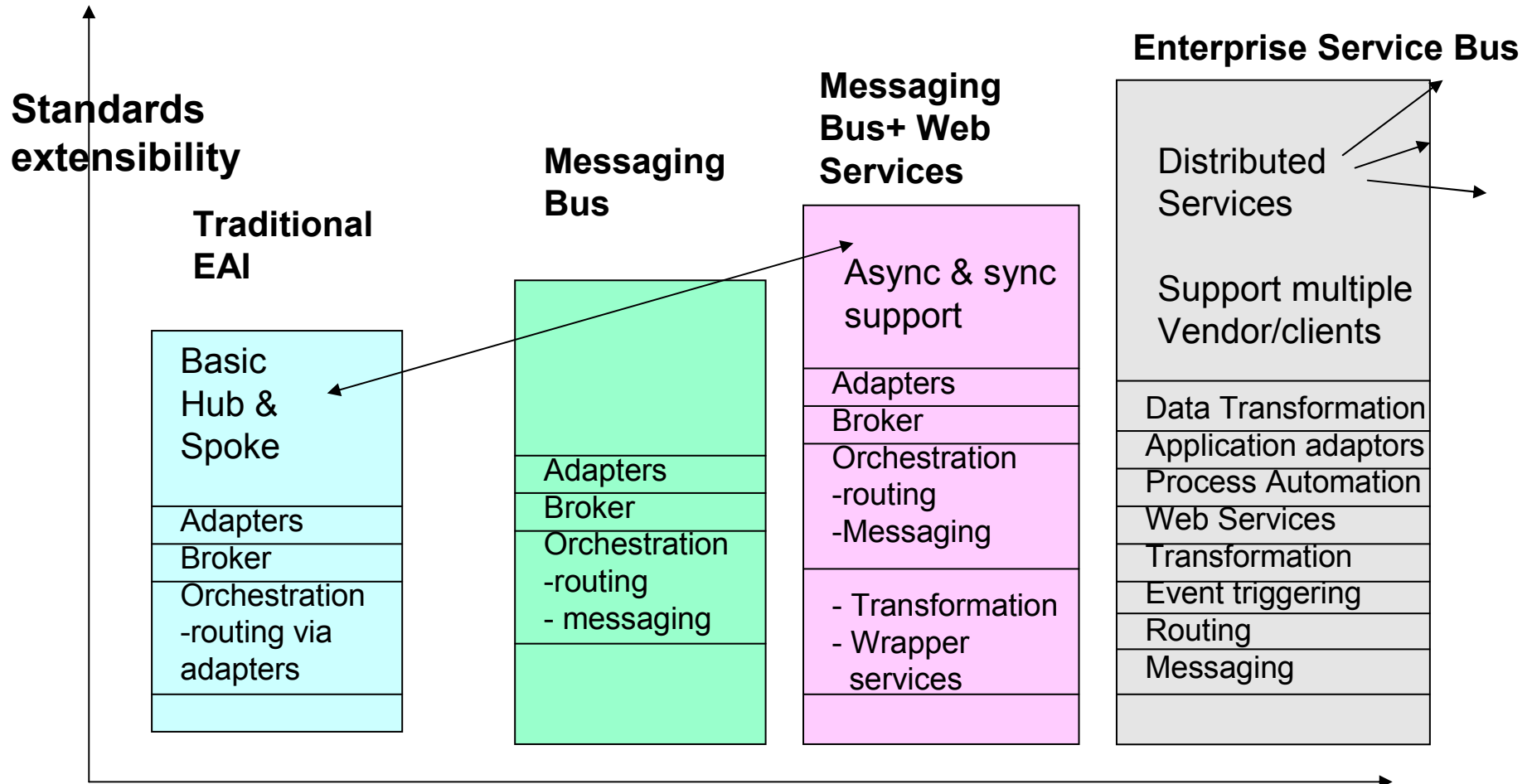


# Subject Service Bus

Service Components

Service Bus

Service Syndication



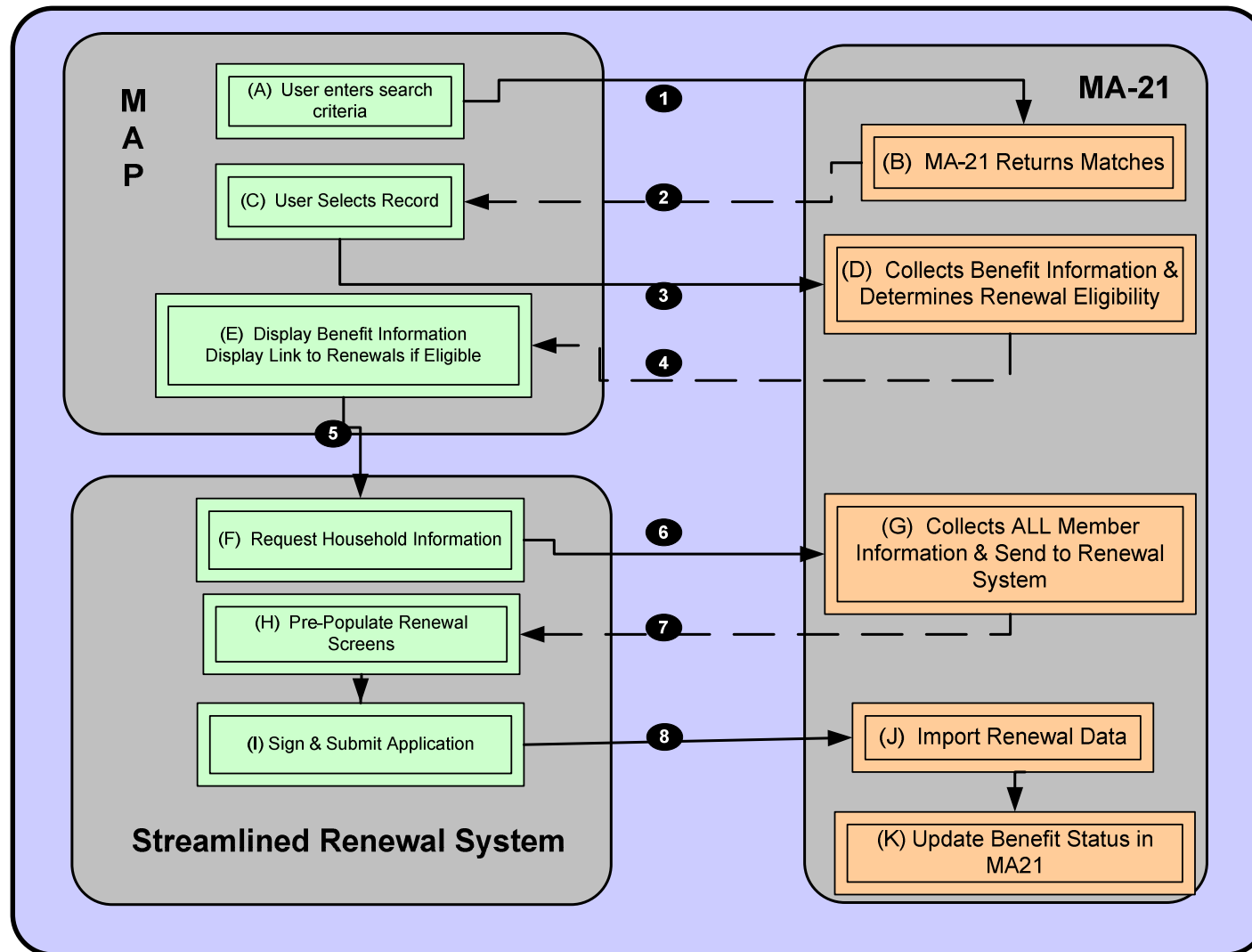
## Evolution of messaging bus

ESB can be described as standards based integration (effectively abstracts: data, function, logic AND the Bus itself)



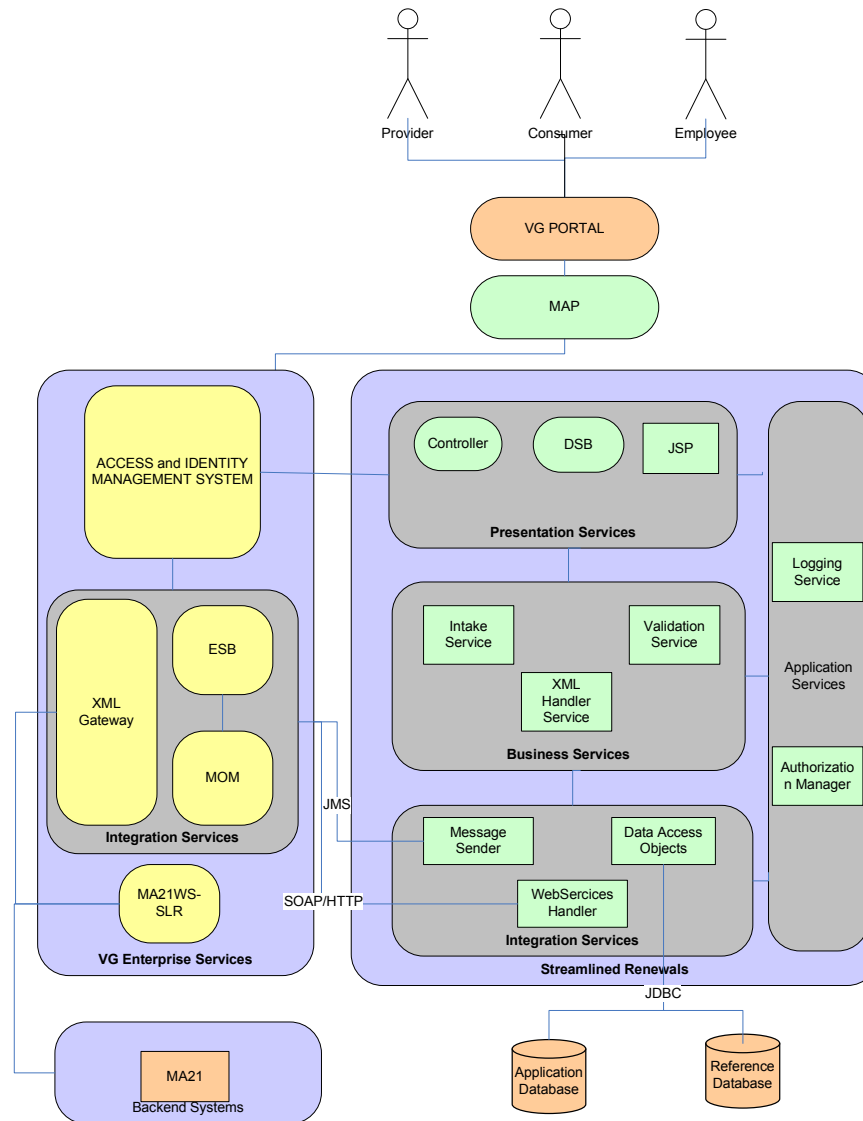
# Subject

## Project Focus



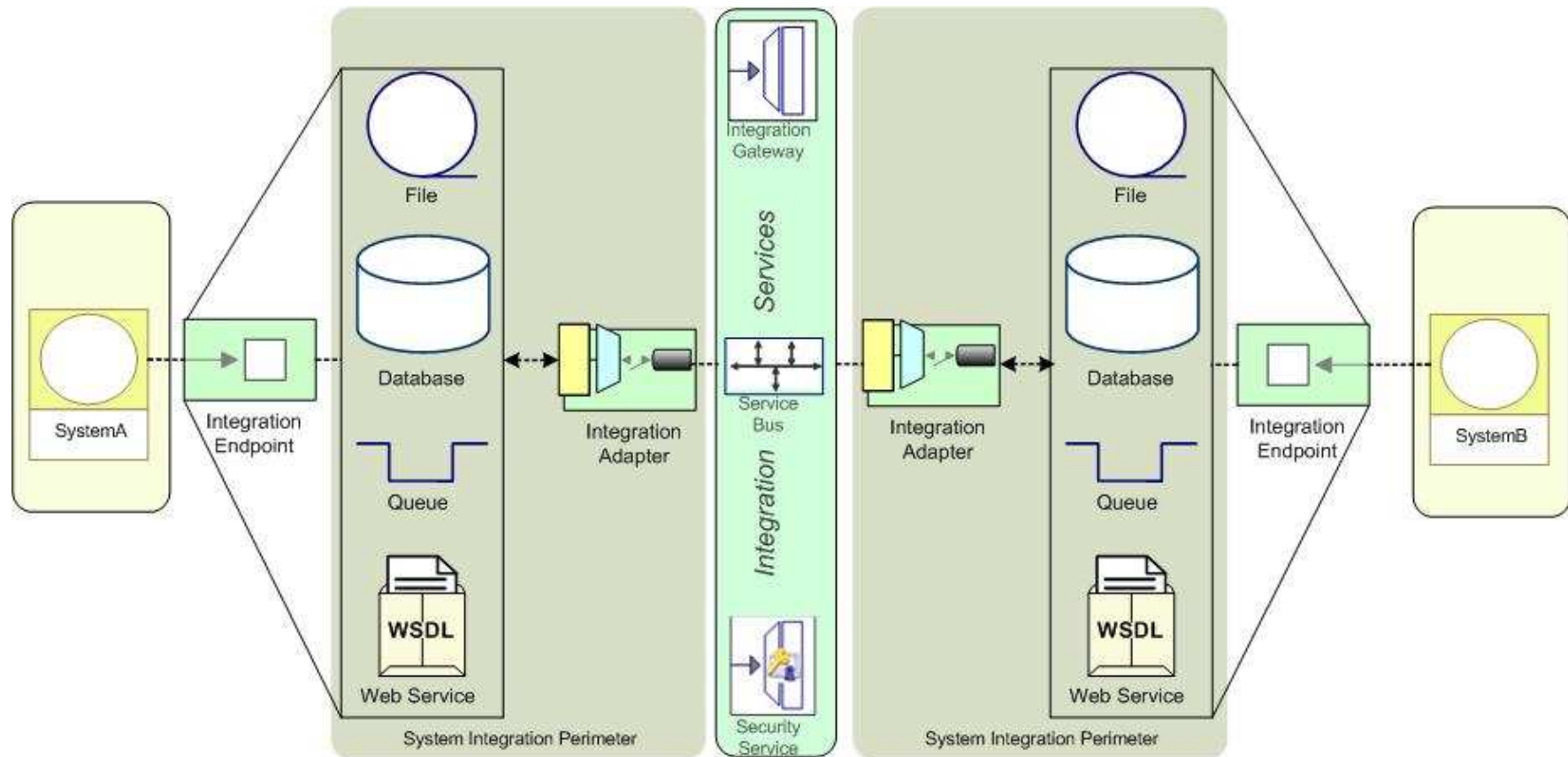


# Subject Conceptual Solution View





# Subject Reference Architecture



## File Transfer Services

Exposed via Web Service Interface  
Source Destination mediation via Integration Bus

## Asynchronous Services

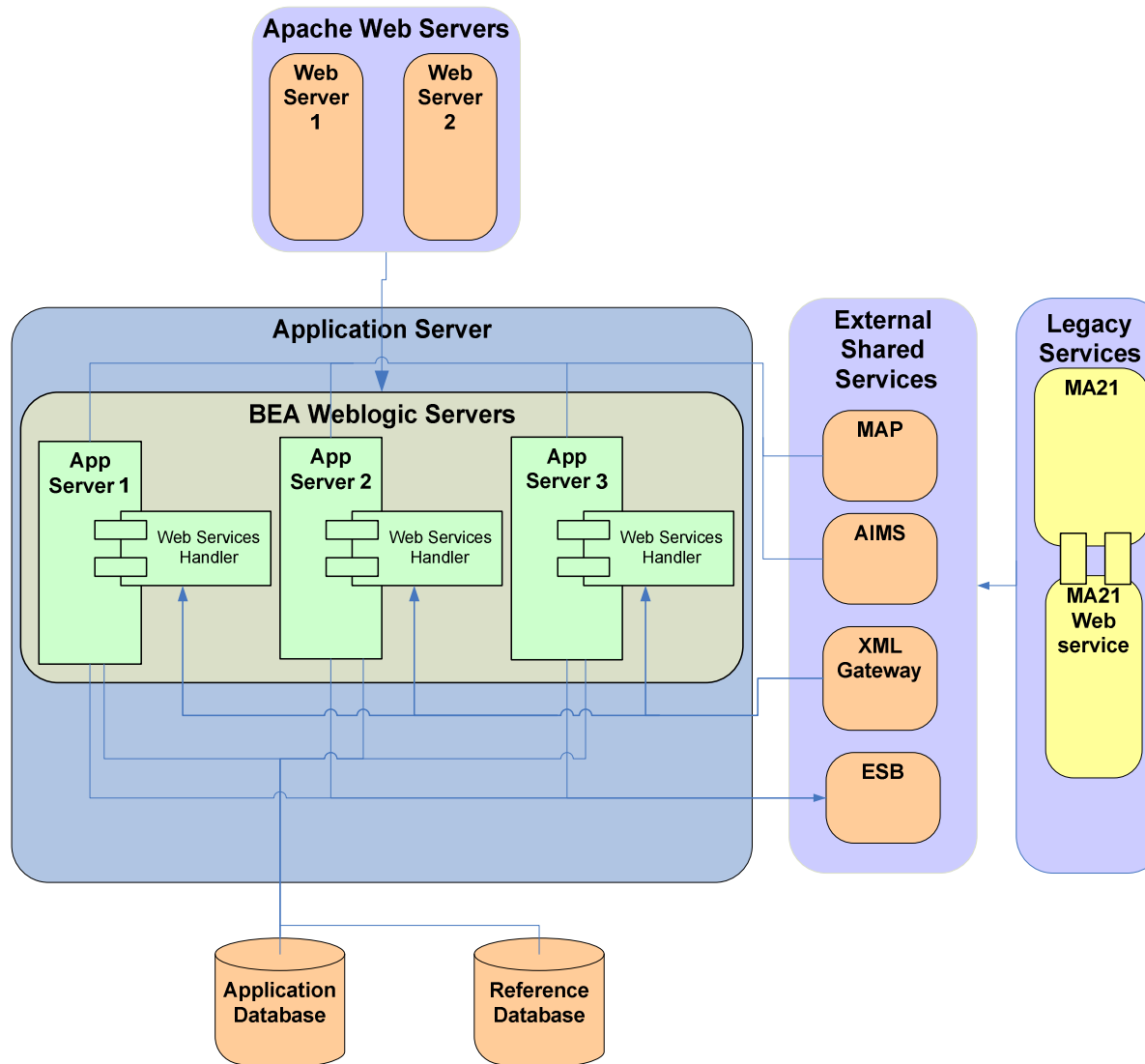
Delivery guaranteed by Integration Bus  
Publishing system delivers payload and continues  
processing its business functions

## Synchronous Services

System issues requests and goes in wait status  
Allows Real Time Integration

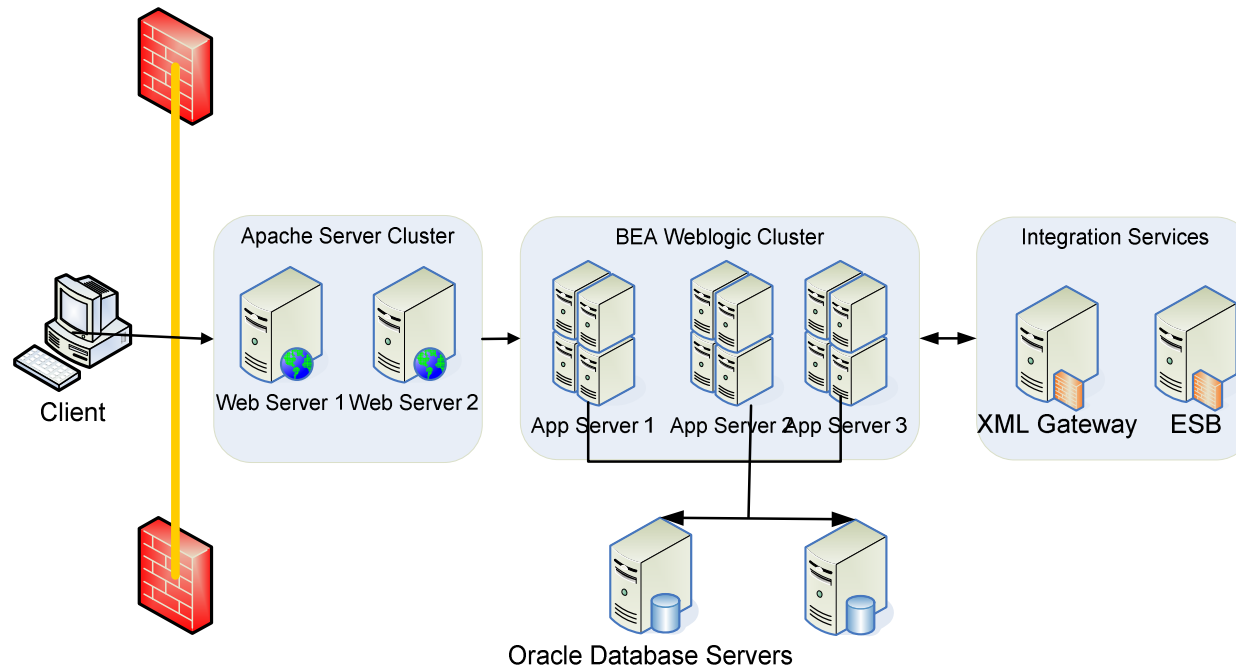


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# Subject Physical View







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## Actual Messaging Flow

